

IN THE CLAIMS:

Please amend claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 18, 21, 25, and 27 as follows.

1. (Currently Amended) A system ~~for configuring differentiated services (Diffserv) over multi-protocol label switching (MPLS) in a network that includes MPLS tunnels,~~ comprising:

a policy server that is arranged to
configure a customer policy comprising a tunnel mode, and
configure a mapping policy that maps between an experimental (EXP) field
and a unique per-hop-behavior-(PHB), and to
send ~~deploy~~ the mapping policy and the customer policy to interfaces of devices of
~~the a network that correspond that includes multi-protocol label switching tunnels,~~
corresponding to the tunnels, at least one of the network devices comprising an egress
interface of one of said multi-protocol label switching tunnels, wherein the interfaces and
the customer policy are associated with a same role name.

2. (Currently Amended) The system of claim 1, wherein
the customer policy further comprises a tunnel group identifier ~~and tunneling~~
~~mode~~.

3. (Original) The system of claim 1, wherein
the policy server translates the mapping policy into device specific commands, and
deployment is performed by deploying commands to specific devices.

4. (Currently Amended) The system of claim 1, wherein
deployment is such that the interfaces associate with at least one of input roles,
output roles and multi-protocol label switching MPLS gateways of customer source and
destination host groups.

5. (Currently Amended) ~~An apparatus for configuring Diffserv over MPLS in a network, comprising:~~

a memory;

a service application residing on the memory,

wherein the service application is arranged to configure a customer policy that comprises a tunnel group identifier and tunneling mode, the customer policy being arranged to have customer traffic mapped into multi-protocol label switching MPLS tunnels corresponding to the tunnel group identifier, and

wherein the service application is arranged to configure an ~~EXP-to-PHB~~experimental-to- per-hop-behavior mapping policy that is arranged to map ~~EXP experimental~~ fields to per-hop-behavior~~PHB~~;

a central processing facility that is arranged to translate the customer policy and mapping policy into device-neutral policy parameters; and

a policy consumer that is arranged to translate the device-neutral policy parameters into device-specific commands, and ~~that is further arranged to deploy~~ send the device-specific commands to policy targets, such that the customer policy and mapping policy are implemented across at least a portion of the network, wherein each policy target comprises a network device, at least one of the network devices comprising an egress interface of said tunnel group.

6. (Original) The apparatus of claim 5, further comprising:

a user interface that is arranged to receive the customer policy and the mapping policy.

7. (Currently Amended) The apparatus of claim 5, wherein

deployment is such that the interfaces associate with at least one of input roles, output roles and multi-protocol label switching MPLS-gateways of customer source and destination host groups.

8. (Currently Amended) The apparatus of claim 5, wherein
the policy consumer is further arranged to attach the customer policy to the
corresponding MPLS-multi-protocol label switching tunnels and deploy the customer
policy to interfaces of the attached MPLS-multi-protocol label switching tunnels.
9. (Original) The apparatus of claim 5, further comprising:
a database for storing the device-neutral policy parameters.
10. (Currently Amended) The apparatus of claim 5, wherein
the service application comprises a tunnel group object that is arranged to create
the MPLS-multi-protocol label switching tunnels by specifying end-point routers and
inter-connecting topology.
11. (Currently Amended) ~~An apparatus for configuring Diffserv over MPLS in a~~
~~network~~, comprising:
a means for defining a mapping policy that maps between an EXP-experimental
field and a unique-PHB per-hop-behavior;
a means for maintaining a customer policy, the customer policy comprising a
tunnelling mode;
a means for translating the mapping policy and customer policy into device-
specific commands; and
a means for sending ~~deploying~~ the device-specific commands to policy targets,
wherein each policy target comprises a network device that includes an interface that is
associated with a role name that is also associated with the customer policy, said
interfaces including an egress interface of at least one of multi-protocol label switching
tunnels.
12. (Original) The apparatus of claim 11, wherein

the customer policy includes information about a tunnel group identifier and a tunnel mode.

13. (Currently Amended) The apparatus of claim 11, wherein deployment is such that the interfaces associate with at least one of input roles, output roles and ~~MPLS~~multi-protocol label switching gateways of customer source and destination host groups.

14. (Currently Amended) An article comprising: a storage medium, the storage medium having instructions stored thereon, wherein when the instructions are executed by at least one device, they result in:

defining a mapping policy configured to map between an ~~EXP~~experimental field and a unique ~~per-hop-behavior~~PHB;

defining a customer policy comprising a tunnelling mode, the customer policy beingthat is configured to govern the treatment of individual customer traffic;

defining a network policy that is configured to define the Diffserv treatment of aggregated traffic;

translating the mapping policy, the network policy and the customer policy into device-specific commands; and

deploying the device-specific commands to policy targets, wherein each policy target comprises a network device that includes an interface assigned a role name associated with the customer policy, at least one interface comprising an egress interface of at least one multi-protocol label switching tunnel.

15. (Original) The article of claim 14, wherein executing the instructions further results in:

generating device neutral information associated with the mapping policy, the network policy and the customer policy.

16. (Original) The article of claim 15, wherein
the device specific commands are generated from the device neutral information.

17. (Original) The article of claim 15, wherein
executing the instructions further results in: storing the device neutral information in a database.

18. (Currently Amended) The article of claim 14, wherein
deployment is such that the interfaces associate with at least one of input roles, output roles and ~~MPLS~~ multi-protocol label switching gateways of customer source and destination host groups.

19. (Original) The article of claim 14, wherein
deploying the mapping policy to the network interfaces further comprises issuing new commands to reconfigure a router based on the mapping policy.

20. (Original) The article of claim 14, wherein
the customer policy includes information about a tunnel group identifier and a tunnel mode.

21. (Currently Amended) ~~A method for configuring Diffserv over MPLS in a network~~, comprising:
defining a mapping policy configured to map between an ~~EXP~~ experimental field and a unique ~~per-hop-behavior~~ PHB;

defining a customer policy comprising a tunneling mode, the customer policy being that is configured to govern the treatment of individual customer traffic;

defining a network policy that is configured to define the Diffserv treatment of aggregated traffic;

translating the mapping policy, the network policy and the customer policy into device-specific commands; and

sending~~deploying~~ the device-specific commands to policy targets, wherein each policy target ~~comprise~~comprises a network device that includes an interface assigned a role name associated with the customer policy, at least one of the interfaces comprising an egress interface of one of multi-protocol label switching tunnels.

22. (Previously Presented) The method of claim 21, further comprising:

generating device neutral information associated with the mapping policy, the network policy and the customer policy.

23. (Previously Presented) The method of claim 22, wherein

the device specific commands are generated from the device neutral information.

24. (Previously Presented) The method of claim 22, further comprising:

storing the device neutral information in a database.

25. (Currently Amended) The method of claim 21, wherein

deployment is such that the interfaces associate with at least one of input roles, output roles and multi-protocol label switching ~~MPLS~~-gateways of customer source and destination host groups.

26. (Previously Presented) The method of claim 21, wherein

deploying the mapping policy to the network interfaces further comprises issuing new commands to reconfigure a router based on the mapping policy.

27. (Currently Amended) The method of claim 21, wherein
the customer policy includes information about a tunnel group identifier and a
~~tunnel mode.~~